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Worldwide Report

LAW OF THE SEA

No. 169



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NEW 200-MILE FISHING ZONE POSES PROBLEMS FOR FISHERMEN

Canberra THE AUSTRALIAN in English 3 Aug 81 p 7

[Article by Peter Dwyer]

[Text] Local fishermen have been warned that they must improve their ability to exploit Australia's new 200-mile off-shore fishing zone or face going broke.

The warning came yesterday from Senator Brian Archer, the chairman of a Senate standing committee investigating the fishing industry.

In its report to be released late this year, the committee is certain to recommend that fishermen take a more professional approach.

Without a new approach many could be forced out of business through intense competition from better-prepared local and international fishermen.

Senator Archer said local fishermen could not expect international boats to leave their waters unless they could demonstrate that they were capable of making proper use of them.

He said: "This is a highly sophisticated and high technology industry and it will need the same sort of people.

"We have fallen behind the rest of the world because we are not deep-sea fishermen.

"We have preferred the things close to the coast that are easy to get and pay best.

"If we don't show that we are going to properly use the 200-mile zone, we don't have any international powers to claim it."

Senator Archer said there were thousands too many boats in Australian waters and many of their owners seemed certain to go broke.

The committee will also be faced with the problem of recommending solutions to a dispute over whether a State has the right to process fish caught in its waters.

Some States favor "open slather" on all waters while others are seeking protection.

Senator Archer warned fishermen that the new zone did not automatically mean a more viable business.

He said: "The people who thought the 200-mile zone was going to have fish jumping into their boats have had to realise that they have got to go out and get the fish.

"The fishing industry was looking at the 200-mile zone to solve a lot of its problems but it hasn't done so automatically and wasn't meant to."

In a submission to the committee, the new Australian Maritime College in Tasmania said the new zone presented the industry with "an opportunity and a challenge."

But it warned that the industry needed to:

- -- Research the fish stocks of the zone.
- --Investigate the effectiveness of various fishing techniques under local conditions.
- -- Train fishermen in new and successful techniques.
- -- Educate fishermen and the public to accept novel species of fish.
- --Develop processing and marketing facilities to cope with the quantities and types of fish that can be harvested from the zone.

Senator Archer and the committee visited the college near Launcheston last week during the committee's final days of hearings.

He said later: "We are out to make sure that the development of the industry is to the advantage of the industry in Australia.

Management

"But we must remember this is a fisherman-based industry, not a government-based one.

"Australian waters are not fish-rich: there is just not a lot of fish. This is why management is so important and we have to make sure the biological side of the issue is not forgotten."

The Tasmanian Government urged the committee to ensure that each State gained the benefit of catches in its waters.

Its submission said: "Unfortunately there is a temptation on the part of some fishing companies to utilise the marine resources around this State and yet bypass its economy by operating vessels and landing their catches in adjacent States."

Senator Archer said it was obvious the States would need to cooperate closely in organising fishing controls for their waters.

23-KILOMETER ROCK BARRIER TO PROTECT UNDERSEA PIPELINE

Camberra THE AUSTRALIAN in English 30 Jul 81 p 17

[Article by Peter Terry]

[Text]

AUSTRALIA is about to break all international engineering records with a \$30 million project to protect the North West Shelf under-sea gas pipeline from cyclone damage. -.

It will frivolve dumping more than two million tonnes of rock to create a hilly barrier stretching 23km out to sea.

The barrier will cover the pipeline to a depth of about 2m and will be capable of withstanding the most fierce underwater currents generated by any control of the control

ated by cyclones.
At the height of the cyclone season off Western Australia's north-west coast, driving cur-rents of up to 10 knots are known to sweep along the sea floor

If they hit the pipeline un-protected, it would smash within minutes — despite the fact that each 9m length of

pipe weighs about 14 tonnes.
According to Woodate's chief pipeline engineer. Dr Errol Seymour, there has been no similar protection project anywhere in the world.

Although other offshore pi-

pelines are sometimes given rock protection against batter-ing from the surf, at most the

hilly barriers stretch only a few kilometres out to sea.

DAMAGE

The construction project will be shared between the Dutch-based ACZ Marine Engineer-ing and Construction of Go-rinchen and Australian-based. John Holland Construction Pty Ltd.

Work is expected to begin next March and take about 15

months to complete.

To dump the rocks, ACZ willbe using a specially designed
ship, the Rocky Giant, of
which there are only two in

the world.

ACD is one of the few companies in the world specialising in underwater construction.

The final rocky barrier will also protect the pipeline from any risk of damage by ships dragging their anchors.

The pipeline comes ashore just north of Dampier through what is today the main anchorage point for bulk

main anchorage point for bulk

Before completing the design specification, Woodside built a replica of the rock barrier on land and used a tractor to drag anchors across it.

The tests proved the barrier provided adequate protection.

OCEAN DEVELOPMENT DEPARTMENT—New Delhi, July 29—A new department for ocean development has been created by the Government to ensure and coordinate exploitation of sea bed resources. The new department has been constituted in terms of the assurance given by the Prime Minister, Mrs Indira Gandhi, who is also looking after the Defence portfolio, during the debate in the Lok Sabha on the demands for grants of the Defence Ministry in the last session. Mr K. Saigal, Additional Secretary to the Cabinet Secretariat, has been shifted to the new department with the same rank. A Secretary for the department is yet to be named. Mr Prem Kumar, now Secretary to the Governor of Uttar Pradesh, will take the place of Mr Saigal in the Cabinet Secretariat.—UNI. [Text] [Madras THE HINDU in English 30 Jul 81 p 9]

FISHING INDUSTRY BOARD SEEKS TO DOUBLE CATCH BY 1990

Further Investment Needed

Auckland THE NEW ZEALAND HERALD in English 9 Jul 81 p 18

[Text]

The Fishing Industry Board believes expansion of the local fishing industry to double the present catch by 1990 will offer value for money in export earnings and job creation.

Its development plan advocates a boost in the combined local and joint-venture catches to a total 400,000 tonnes of fish a year at a further investment of \$200 million.

But the board hig' lights an immediate need to stabilise present growth by providing a price stabilisation scheme for local deep-water fisher-

The board economics and marketing manager, Mr Russell Armitage, said yesterday that the fishing industry had recruited a lot of financial support to develop to its present stage.

It now faced major problems if further assistance was not given in consolidating its development.

Subsidised

Local fishermen have been seeking a price support scheme for less-preferred deep-sea species such as mackerel and barracouta, which have good potential market in many Third World countries.

Such a scheme could keep bigger boats in business and help to open up new export markets. At present many local deep-sea fishermen are competing against heavily subsidised foreign trawlers, which often employ low-paid crews.

Exports of mackerel and barracouts amounted to 12,000 tonnes last year and were valued at \$5.5 million.

A survey of the activities of New Zealand's 12 largest trawlers revealed they had caught 16,000 tonnes last year worth \$8 million in exports and had returned a combined loss of about \$1.9 million.

Greater Risk

Mr Armitage said the board's recently released development plan outlined the need for a major capital injection to cope with the next stage of development.

injection to cope with the next stage of development.

That step involved greater financial risk than development so far, he said, and there was also a need to define an appropriate role for foreign fishing boats.

The board's development plan makes the following points:

 The industry, which now employs 5000 people, could employ more than 10,000. Export earnings, \$162 million a year at present, could increase to almost \$300 million in an industry with at least a 75 per cent domestic content.

The industry will need a further \$200 million investment to realise such growth and will need assistance for the next three to four years. It now receives about 8 per cent of its export earnings in real support.

real support.

Mr Armitage said to achieve a 400,000-tonne catch, a \$65-million investment would have to be made in shore processing and \$150 million in fishing boats to work towards a maximum domestic content.

New Jobs

It was envisage a that domestic fish processing would increase from 108,000 tonnes to 260,000 tonnes and jointventure processing from 12,000 tonnes to 70,000 tonnes.

About 900 new jobs could be provided at sea and if the major portion of the processing was retained on shore an additional 4400 jobs would be created as well as associated support services.

Mr Armitage suggested the processing investment should come first because there was less risk attached to it.

Gross exports would increase from \$162 million to about \$300 million by 1990, with the actual domestic content of the export value amounting to about \$240 million by the end of the decade.

Confined

"Although the fishing industry has the potential to be a significant industry, its possible size must be kept in perspective — it will not be another dairy industry," he said.

Mr As mitage said the development plan was based on the assumption that foreign licensed fishing boats would be confined to a total 100,000 tonnes catch and restricted to fishing in area "E." to the south of the South Island.

Another vital assumption was that the resources would be capable of yielding about 500,000 tonnes of fish a year.

"Two of the most encouraging figures which came out of the study were that an additional \$1 invested in fishing can produce almost 50c in exports every year, and one job in the fishing industry equates at present to almost \$15,000 in exports and \$23,000 for the expansion.

"That one job in fishing could be created for every, \$40,000 of investment. That compares with \$75,000 for farming and \$1.3 million for large energy projects, as quoted in a recent study by the Meat and Wool Board economic service."

Mr Armitage said there were many other beneficial flow-on effects for local industries, principally in ship-building, packaging and construction.

High Costs Lower Catches

Auckland THE NEW ZEALAND HERALD in English 21 Jul 81 p 20

[Text] New Zealand fishing grounds may be less abundant than at first thought and fishing costs may dictate for lower catches than the recommended yield.

Marine biologists have recommended a total sustainable catch of all fish species which now seems impossible to senieve.

Economic considerations, such us the price of fuel and the market value of catches, have made it uneconomic to land the total sustainable catch.

The assistant director-general of the Ministry of Agriculture and Fisheries, Mr Royce Elliott, said the economic sustainable catch might be only about two-thirds the total sustainable hiological yield.

biological yield.

He said the total allowable catch included big resources such us southern blue whiting in area "E" (New Zealand's most rugged fishing ground) which no one had been very interested in.

Marine biologists have set

a total allowable catch, of all fish species, of about 500,000 tonnes, but the total catch by local, joint-venture and foreign fishermen has amounted to only about 250,000 tonnes a year.

All Types

Mr Elliott said the size of the catch was one of the facts becoming apparent from a thorough review of all foreign joint-venture fish-

ing.

The ministry expected to obtain accurate profiles on all types of fishing within the 200-mile zone as a result of the review.

The major reassessment of foreign joint ventures is being conducted by an interdepartmental task force which includes representatives of the Treasury, the Ministry of Foreign Affairs, the Trade and Industry De-

partment and the Fishing Industry board.

The object is to give the Government an indication of what fishing grounds, types of fishing and processing local fishermen can expand into.

Mr Elliott said squid jigging and tuna fishing were being given top priority because it was necessary to have some palicy decisions before the summer season.

Fin-fishing joint ventures would be examined sext, he

"What we expect to end up with is a set of profiles on each section of the fishing industry, and "sen we shall have to bite the bullet and make some decisions."

The ultimate decision would be left to the cabinet eco.somic committee.

It is the first time the Pishing Industry Board has been directly involved in an appraisal of foreign fishing. The board's economics and marketing manager, Mr Russell Armitage, said the board's presence in the task group would ensure the views of local fishermen were heard.

Policy Rules

He said local fishermen were seeking policy groundrules on joint ventures.

They were not only seeking to increase their catching opportunities but also toping to process more fish from foreign boats.

"It seems we may have made a mistake in the past by not allowing local processing companies the opportunity to tender for foreign processing in New Zealand," said Mr Armitage.

At present a relatively small percentage of the total foreign joint-venture catch was processed in New Zealand.

Method Costly

Mr Armitage said local fishermen did not seem to be interested in syaid Jigging at present.

The type of boat used was not compatible with any other form of fishing and the method was a castly one.

"While squid prices in Japan remain low there is not stuch incentive," he said.

There was, however, interest in processing more squid in New Zealand.

Same Government decisions on aquid joint ventures will have to be made next month.

Old Wrangle

There has been considerable local interest in all kinds of time fishing and the fisheries policy-makers are faced with some difficult decisions.

An old wrangle between local skipjack tune fishermen and American superseiners has still to be resolved. The resource is shared by both and there is atrong pressure to ease the foreign superseiners out of local waters.

There has been more recent local interest in southern blue fin time and albacore tuna fishing.

West Coast fishermen are now developing the blue fin tuna fishery on their own account, and the Japanese Tuna Association is werried about the effects on its fleet It normally has about & long-line boats in New Zealand waters each winter.

Turned Over

The development of a new albacore tuna fishery is a coveted ambition of local fishermen, some of whom reacted in a hostile marmer when the Ministry of Agriculture and Fisheries used a Japanese research boat to investigate the resource this year.

year.
The local flahermen feared the resource, or part of it, may be turned over to Japanese fishermen.

These are a few of the problems the joun-venture task group has to tackle in the next lew weeks. There are other tasses equally as saicky to sort out regarding fin fishing and trawling before the fin-fishing season starts at the end of March.

TWO BOATS TEST DEEPWATER TRAVILING OFF SOUTH ISLAND

Auckland THE NEW ZEALAND HERALD in English 21 Jul 81 p 3

[Text]

A first effort at deepwater trawling off the South Island is expected to ses two tackland tranters a ranch worth about \$5.00 for a week's flabling.

The venture could trigger much bigger forays by Auch and crawiers into deep contirental-shell fishing for orange roughte and other species above the Challenger Placent, it major West Coast listing ground

South Island fishermen already fish for hoke and hake off their west coast

Sandord Ltd sent the Albert Sanford and San Rakuno trawiers to the South Island hote fishing ground last week to see if there was any economer potential there.

The company's general manager, Mr Neil Mills, said the trawiers had netted about 269 basants about 79 topnes, of hote so far

The catch would be landed at Onehunga temerrow

Mr Mills said that if the venture proved staelf the trawlers would probably be sent back for another catch.

The two boats, the company's largest, were not designed for deep-water trawling sad were working to the limits of their capability over the host grounds

"If it pays off, we shall crossider putting bigger winches and gear on the boots and perhaps having a

go at the orange roughe over that part of the Challenger Plateau which is ciose to Onehurgs." be said.

Sationi was already pro-cessing orange roughts and ores dury cought by Russian tysolers in a joint venture under the name of Sannar Finternes Ltd.

Mr Mills said the presence

Mr Mills said the presence of two Auctiand boots off the South Island was generally seiromed by other New Zealand fishermen as it was a positive indication of the merest New Zealanders were taking in deep-water fishing.

FUEL COSTS FORCE REDUCTION IN NAVY FISHERIES PATROLS

Auckland THE NEW ZEALAND HERALD in English 29 Jul 81 p 16

[Text] The Royal New Zealand Navy will cut back fisheries patrols in a bid to trim its fuel bill.

One ship and four par-boats are at present ea... ployed keeping an eye on up to 300 foreign fishing boats in New Zealand's 200-mile zone.

One of the small Lake class patrol boats will now be removed from the job and patrols by the resources surveillance ship HMNZS Taranaki will be reduced.

The moves are part of a general reduction in flying hours and steaming time for aircraft and ships announced yesterday by the Ministry of Defence in an attempt to cut its fuel bill.

Cruise Off

It has been suggested in Navy quarters that the ministry plans to save about \$14 million in fuel bills, but the ministry's director of public relations, Wing Commander G. T. Clarke, said that was not an official figure.

He said the move was in line with the Government's policy of cutting operational

and transport expenses. One result of the cuts was that the Frigate HMNZS Otago would not make a planned cruise to the South Pacific later this year.

Wing Commander Clarke said there was a change of emphasis as a result of the latest budget.

The defence budget had increased in real terms and

there was an actual cash increase of about 22 per cent. ash provided for new equipment had more than doubled in some respects.

Wing Commander Clarke said the Royal New Zealand Air Force had bought three new Boeing 727s and the Orion maritime surveillance aircraft were being re-equipped with new electronic gear.

He said the budget did not provide for a new Navy frigate, because the recent British plan to dispose of a large number of warships

had radically affected progress on finding a re-placement for HMNZS Otago.

The director of the fisheries management division of the Ministry of Agriculture and Fisheries, Mr Brian Cunningham, said the division was still waiting to be officially informed of the cuts to the coastal surveillance force.

Mixed Approach

Incidents of poaching by foreign boats appeared to be foreign boats appeared to be vers on foreign fishing boats declining, he said, but that could be due to the very presence of the patrol craft.

expected in the seasonal fluctuations of foreign fishing in New Zealand waters.

Mr Cunningham said the ministry preferred a mixed

approach to policing. At pre-sent it placed its own fisheries inspectors on about 15 to 20 per cent of all the for-eign licensed trawlers and relied on the Navy and Air Force to provide patrols and conduct random inspections.

He said the Navy role was an iraportant one because ministry observers on for-eign boats would find it difficult to keep track of nonlicensed foreign intruders.

Observers

The Ministry of Agricul-ture and Fisheries' own inshore patrol boats could not take over from the Navy nor fill any gaps, as they were designed for a different role.

A scheme announced in the budget to provide finance to put more New Zealand observers in foreign boats was also unlikely to provide any additional surveillance.

Under the scheme. Government financial support would be given to loc i fishermen who wished to work as obsersea fishing methods.

Mr Cunningham said the local fishermen would double He said little change was up with ministry inspectors on foreign boats.

MINISTER OF NAVY STATEMENT—Minister of Navy Adm Maximiano de Fonseca pointed out in an interview with the news agency EBN yesterday the importance of the 220-mile territorial sea limit of Brazil. According to the minister, the recognition of that limit by other countries in the guarantee that there cannot be "innocent passage" along the coast of Brazil. As far as what the country spends on the armed forces, emphasizes the minister of navy, Brazil is one of the country which spends the least in that sector, allocating only 7 percent of the budget to it. With respect to the recently created Brazilian Navy Women's Corps, Maximiano said that selections for the second class will be made next October [Excerpt] [Sao Paulo O ESTADO DE SAO PAULO in Portuguese 8 Aug 81 p 2] 8908

CRITICISM OF U.S. POSITION—Senator Paulo Brossard (PMDB-RS) in Brasilia, yesterday defended the 12-mile territorial sea, arguing that the proposal by the convention on the Law of the Sea favors the interests of Brazil. The former opposition leader, who participated in the Third Law of the Sea Conference, read an extensive report to a plenary session of the Senate and at the end commented on the principal material of the meeting, which was the legal control of the ocean floor. Brossard also criticized the position of the United States, which is seeking a revision of the thinking adopted on the subject up to the Carter Administration. The legislator believes that such an attitude is not justified and the great risk is that it will result in a selfish formula: "The United States will honor the United Nations as long as the United Nations protects its interests." [Excerpt] [Sao Paulo O ESTADO DE SAO PAULO in Portuguese 12 Aug 81 p 5]

DOMINICA

PARLIAMENT APPROVES 200-MILE TERRITORIAL LIMIT

Bridgetown ADVOCATE-NEWS in English 12 Aug 81 p 7

[Text] Roseau, Dominica, Tuesday (CANA)—Dominica said today that it hoped its adoption of the laws governing the international law of the sea would allow it to enter into treaties with countries which will be affected by the island's new 200 mile territorial limits.

Parliament yesterday approved an act tabled by the island's Prime Minister Eugenia Charles, establishing the limits of Dominica's territorial sea, the contiguous zone, and the exclusive economic and fisheries zones.

Speaking in Parliament, Miss Charles said that she expected France and Venezuela to be among countries affected by the adoption of the legislation. Dominica is sandwiched between two French islands, Guadeloupe in the north and Martinique in the south. And Venezuela has disputed the ownership of Tiny Bird Island off the Dominica coast.

During debate on the Bill, opposition Senator Pershin Waldron suggested that the Government on the possible joint exploration of Bird Island, to determine whether there is oil or there is no oil.

Bird Island, situated 90 miles west of Dominica, is within the country's 200 mile territorial boundary as stipulated by the international law of the sea, its ownership has often been the subject of intense debate here.

Senator Waldron said that Dominica should neither give up nor say that Bird Island was not a part of its territory, alluding to the fact that Venezuela was now laying claim to five eighths of Guyana's territory.

"That 200-mile limit, this is what needs to be explored to ascertain whether Bird Island really belongs to Venezuela or whether Bird Island really belongs to Dominica," he said.

The opposition senator contended that Bird Island was rich in oil and other natural gases, emphasising that if it were to be explored and oil were discovered, it would have a significant impact on the development of Dominica.

FISHING PACT DETAILS—Kingston, Jamaica, Wednesday (CANA)—A fishing agreement signed last week between Jamaica and Colombia relates only to Jamaicans fishing in the waters around the small Colombian island of Bajo Nuevo and the Saranilla Cays, no more than 100 miles south of Kingston, a Senior Jamaican Fisheries Official has said. The agreement allows for fishing 12 miles around Bajo Nuevo and the Saranilla Cays. It does not extend to the waters off the Colombian coast, the Official who was involved in drafting the agreement said. Bajo Nuevo and the Saranilla Cays are more than 400 miles off the Colombian mainland. Under the agreement, which is for two years at the outset, the Jamaican fishermen will be allowed to take 840 metric tonnes of fish from the waters around the islands. There is no reciprocal arrangement for Colombians to fish in Jamaican waters. The pact, which was signed in Bogota last Thursday, was arrived at after 11 years of sporadic negotiations. Jamaicans fish on the Pedro banks, on which lie the Jamaican-owned Pedro Cays. [Text] [Bridgetown ADVOCATE-NEWS in English 6 Aug 81 p 3]

MORE PIRACY--Piracy is back at the Apapa Ports in Lagos. Last week, a container was emptied on a board a vessel, MARGARETHE MAERSK at about 10.0, clock in the night. The twenty feet high container contained 266 cartons of men's jogging shoes. A gang of men were reported to have boarded the vessel and the two watchmen and the agents representative Mr. Ebenesser were threatened with knives and locked up in the vessels tallymess. When the crew and officers of the vessel who attempted to gain access to the foredock were kept off by the pirates waring chains and knivies. A re-enforcement of 12 thivies later came in aid of their colleagues and climbed up to the ship to hasten up the illegal operation. The police at the Apapa Port said that they are not aware of the incident but in a letter to the Port Manager, the police, the port commandant and the police officer in charge of Mobile Police in the port were all informed of the incidence by the Master of the vessel MARGRETHE MAERSK, Mr B. B. Brinkhelt. In another development, the officer in charge of the police post at the Apapa Ports, said that his men intercepted an ambulance stocked with two Suzuki engines valued at #4,500. Two persons were arrested over the incidence and in the ship where the engines were removed had in it 16 other cases of similar engines estimated at #48,000. The police also said it recovered from thieves five water pump engines. The Nigeirian Ports Authority recently said that it has set up a coastal guard to patrol the ports to check the excesses of pirates on our territorial waters. The services of the navy is greatly tapped in the efforts to fight pirates. [Text] [Lagos BUSINESS TIMES in English 10 Aug 81 p 32]

EEC MACKEREL QUOTA—The EEC has once again overfished its macherel quota in the North Sea, and the Norwegian Government will raise the matter with the EEC Commission and ask for all the statistical information available on catches both in the North Sea and the Skagerrak. According to information received by Norsk Telegram Byraa, EEC ships had overfished their quota by 25 percent as of 31 July, while up to 6 August Danish vessels had taken a further 995 tons of mackerel in Norwegian waters. This year the EEC has a total quota of 11,700 tons, 2,500 tons of which are in Norwegian waters. Two thousand tons were allocated to the Faeroe Islands and 800 tons to Sweden, so that the EEC's total quota in the North Sea and the Skagerrak is 8,900 tons. This quota has been overfished by 2,200 tons. Fisheries Ministry under secretary Ivan Kristoffersen confirmed to Norsk Telegram Byraa that Norway will raise the matter with the EEC Commission. [Text] [PM281113 Oslo AFTENPOSTEN in Norwegian 26 Aug 81 p 4]

INDUSTRY STILL SHOWS LITTLE INTEREST IN SEABED MINING

Stockholm SVENSKA DAGBLADET in Swedish 1 Aug 81 p 5

[Article by Karin Henriksson]

[Text] There are nodules in the Baltic Sea, and the technology exists for taking them out--but so far the metals can still be bought more cheaply elsewhere.

Swedish firms are beginning to gain a solid foothold in the now-traditional offshore industry, meaning the extraction of oil and gas from the seabed. But there is no Swedish participation in the international consortiums that have been set up to investigate nodules and nodule technology.

Jan Palmer, head of section at the National Board for Technical Development (STU), says: "For the Swedes to start something on their own would be insane--it is too expensive. At the same time, however, it seems that Swedish industry does not want to take a chance on any nodule projects, even though they ought to be worth looking into."

The Swedish CTEC [Ocean Thermal Energy Conversion]—a partnership made up of four firms: Alfa-Laval, the VBB [Swedish Hydraulic Engineering Company], ASEA [Swedish General Electric Company] Cable, and the Johnson Group—had plans for developing a facility to extract energy from temperature differences in tropical seas (a process known as ocean thermal energy conversion). But it was difficult to get enough government support for the project, and so it was quickly scaled down.

Facility for Millions of Kronor

Jan Erik Jansson of the VBB says: "Now the VBB and Alfa-Laval are trying to set up a pilot plant in which an OTEC facility with an output of 1 MW will be combined with a desalting plant."

The pilot plant, which will cost around 100 million kronor, is being financed in part by the Nordic Industrial Fund. It will probably be built in the Caribbean.

Jan Erik Jansson says: "We estimate that production will be expensive, but it will still be competitive compared to the present alternative, in which seawater is desalted in oil-fired distillation plants, with the electric energy being provided by diesel-fired power plants."

Jan Erik Jansson says: "From a longer perspective, we are naturally hoping for bigger projects, but not much is happening at present, not even in the United States, where the Reagan administration has cut back on appropriations for such activity. At the moment, the Japanese are the most active."

Experiments in Sweden

But when it comes to getting food from the sea, things are beginning to happen even in Sweden. In this case, it is a matter of less money, quicker results, and a technology that is easier to handle.

Jan Palmer says: "In 5 years we will have a well-developed aquiculture in this country." And he mentioned eel growing in waste water as an example of experiments that have succeeded.

"As an example of something that is more of a curiosity, we can mention that we have succeeded in extracting uranium from seawater. There are uranium ions in the water, and they can be filtered together, provided that the flow of water is large enough."

In other areas, experiments are also underway with wave energy and with taking sand and gravel from the seabed, among other things.

Testing and monitoring the sea environment is another area of research that has already achieved commercial importance. The offshore industry is becoming increasingly dependent on data concerning salt content, flow rates, and so on. Information about the sea environment may make it possible to avoid more accidents like the one involving the "Alexander Kielland."

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END

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